8. INTERNATIONAL CO-OPERATION OF THE CZECH REPUBLIC IN THE AREA OF RESEARCH AND DEVELOPMENT

According to the Act No. 21/1993 Col. (the so-called Competency Act), the Ministry of Education, Youth and Sports of the Czech Republic is responsible for the international co-operation in research and development, including the responsibility for the conclusion of relevant agreements. From the procedure point of view, international agreements in the area of research and development belong, in the Czech Republic, among those approved by the government of the Czech Republic in the form of a resolution and also by Parliament of the Czech Republic, for their ratification.

The international co-operation in research and development (IR&DC) is created as a long-term conception leading towards the development in the country prosperity by effects of the value added, which the international co-operation creates. Joint research or development projects or a participation in development work and the participation in international multilateral projects (activities) always make a base and the main part of the international co-operation in R&D.

The main priority of the Czech Republic is to be involved in research and development structures of the European Union, especially in the finalisation of the most effective participation in research and development framework programmes by EU and EURATOM, especially in the 6th Framework Programme of EU and in EURATOM – 2002–2006, and 2007–2013 the 7th EU Framework Programme and EURATOM, the participation in the creation and structuring of the European Research and Innovation Area, and the participation in the implementation of the so-called Lisbon strategy also belongs among the priorities. However, independent projects are also important, especially those of multilateral and bilateral co-operation selected for the financial support in public tenders, as well as the support of the participation in important international government and non government organisations.

Similarly as the National Research and Development Policy the policy in the area of international co-operation (which makes a part of the National Research and Development Policy as an independent sub programme) should also correspond with the policies of the EU member countries at least as much as it is required by the EU legislature. It relates especially to the application of Article 169 in the European Union Agreement, in the Amsterdam wording, which allows the European Community to design, together with the member countries, European research and development programmes and to participate in their funding and contribute, in this way, to the co-ordination of national research and development policies. In order to achieve the required level of integration in the area of research and development within EU, it is required to progress in accordance with general procedures used in advanced EU countries and to achieve the legislative environment, which would support this integration as much as possible.

Apart from the European area of advanced countries, the created IR&DC policy should consider also the legislative environment existing in other Central European countries as well as the R&D policy in USA, Canada and in the advanced countries in Asia.

The current possibilities in the involvement in programmes of international co-operation in the area of research and development will be described within the following division:

- European Research and Innovation Area (8.1)
- Framework EU programmes in the area of research and development and Euratom (8.2)
- Liaison Information Office of the Czech Republic in Brussels – CZELO (8.3)
- Multilateral intergovernmental co-operation (8.4)
- Other multilateral co-operation (8.5)
- Bilateral co-operation (8.6)
- Support of IR&DC projects by MEYS (8.7)

8.1. EUROPEAN RESEARCH AND INNOVATION AREA

The European Research and Innovation Area (ERA) was created by the decision of the European Council and its basic idea was to create the unified European area for research and development, which should help in the achievement of better cohesion in this field and to contribute to better competitiveness of Europe, when compared with USA and some Asian countries. The idea has been based on the fact that research and development expenditures have been declining in Europe as well as the investments in research. Careers of scientific or research workers have not been attractive life or work goals and the participation of women in research has been also unsatisfactory. Rare research resources have not been always used for the society benefit and there have been still some ethical problems occurring in science (e.g. the research of embryonic master cells). The founding of the European Research Area should help in resolving these issues. This new environment gives the opportunity for the occurrence of proposals of new framework programmes. ERA covers framework programmes, national policies of the member EU countries, their co-ordination, and European research organisations. This all should result in a real European science and research policy. The most important thing is the fact that framework programmes are established with the objective to contribute to the creation of the European Research and Innovation Area – ERA. The European Research and Innovation Area, its structuring and strengthening should contribute to better quality of life in the European Union and in Europe generally by the fact that the European competitiveness would increase, when compared with USA and Japan. This should be achieved by the better utilisation of funds invested in research and development (not only the public ones, but especially the private funds) and by the increased efficiency of research and development and by the support of the research infrastructure. The Lisbon Strategy, commencing in 2000, should contribute to these objectives. Its goal is the "fast creation of the European Research and Innovation Area, while sustainable economic growth and social cohesiveness are considered. The final objective is to make the Union the most competitive and dynamic economy based on knowledge by 2010". The Lisbon Strategy resulted in the so-called Barcelona Objective – to achieve that the share of research and development expenditures should become equal in EU to 3% of GDP by 2010 (1 % should come from the public sources, while 2 % should come from the private sector).

8.2. FRAMEWORK EU PROGRAMMES IN THE AREA OF RESEARCH AND DEVELOPMENT, AND EURATOM

8.2.1. GENERAL CONNECTION BETWEEN THE IMPORTANCE AND THE BENEFIT OF THE CZECH REPUBLIC PARTICIPATION IN FRAMEWORK PROGRAMMES FOR THE SCIENCE AND TECHNOLOGY

The co-operation in the area of research and development within the European Union takes place on the basis of the so-called framework programmes. Their creation and funding have been established even in the Agreement on the European Union and it has been inserted also in the proposal of the European Constitution. The EC framework programme is based on the Chapter XVIII in the European Union Agreement, and on Articles 163 and 171. The 4th Framework Programme (4th FP) finished in 1998 and the 5th Framework Programme (5th FP) started in 1999. The 6th Framework Programme of the European Community has been in place since 2002, as well as the programme EURATOM, which should finish in 2006. The 7th Framework Programme will start in 2007. The Directorate General for "Research and Innovation" within the European Commission is the main gestor of the co-operation. Other directorates, which are responsible for the main topical areas of the framework programmes, co-operate as well. They are responsible not only from the research point of view, but also generally from the factual point of view (information technologies, telecommunications and transport, industrial technologies, the environment, the energy industry, etc.).

Since February 1995 (until 30 April 2004), there has been the European Agreement on the Accession of the Czech Republic to the European Community and their member countries (the Association Agreement) valid. The so-called Additional Protocol to this Agreement executed in 1996 says that an associated country has got the right to access all EU programmes. However, costs of this participation had to be born by the associated country with its own means. This principle was implemented in the 3rd Framework Programme in the form of the "project by project" and in the 4th Framework Programme that related to the Activity 1 – specific programmes. The then Activity 2, called INCO-COPERNICUS – the international co-operation, was supported from the budget of the 4th FP, but also co-funded from the budget of target-oriented funds determined for the international co-operation in research and development of the associated countries.

The 5th FP commenced in 1999 and brought it meant important changes for researchers in the Czech Republic. On the basis of an invitation by EU (together with 10 other countries), the Czech Parliament approved of the participation of the Czech Republic in the 5th FP in the role of an associated country with the understanding that it would contribute to the budget of the 5th FP. The decision by the Association Council, which has become valid on 1 August 1999, established conditions on the full participation (association) of the Czech Republic in the 5th Framework Programme. Czech researchers thus gained almost the same rights (now, i.e. in the 6th FP, they have got them) as researchers from the EU member countries. Possibilities and conditions on the accession and participation of the Czech Republic in framework programmes have been a big challenge for the presentation of research and development

abilities existing in the Czech Republic and it offers the chance to position the country in line with European (and also other than European) research and development entities. It is also a challenge that has an important organisational character – it is a test of the organisational abilities, which should prove that the country could handle the participation in these extensive programmes.

Together with the accession of the Czech Republic to the 5th FP, the country got also involved in the 5th Framework Programme EURATOM, which has been administered separately.

Possibilities of the Czech Republic to participate in the decision-making process and in the management of the programme increased in quality with the 6th Framework Programme. Research and development integration policy possibilities of the Czech Republic to enter the European structures have substantially increased as well as the possibility to actively participate in the creation of the European Research and Innovation Area. The participation of the Czech Republic in the 6th EU Framework Programme and in the 6th Framework Programme EURATOM became possible, in the first year (2003), on the basis of the Memorandum of Understanding executed between the Czech Republic and the European Community on the association of the Czech Republic to the framework programmes. The Memorandum was executed in December 2002 and passed for approval to the Czech Parliament, which recommended the ratification of the Memorandum by the country president. The Memorandum has become valid at the end of 2003 and participants from the Czech Republic thus could participate in all calls on the presentation of project proposals from the beginning. According to the participation rules of the 6th FP, the then candidate countries received the same rights as the member countries from the very beginning. The accession of the Czech Republic to EU on 1 May 2004 thus not influenced the rights of the Czech Republic in its participation in framework programmes.

The 6th Framework EU Programme will finish in 2006. A lot of attention was turned to it in past issues of the "Guide" and this issue, therefore, will provide for the first information on the 7th Framework EU Programme. Parties, interested in the actual information about the 6th Framework Programme, should visit the Internet address: ***http://www.6rp.cz***.

8.2.2. 7th FRAMEWORK EU PROGRAMME

The proposed 7th Framework Programme was presented to the EU Council in April 2005 in the form of a Proposal of the Decision by European Parliament and the Council on the 7th Framework Programme of the European Community related to research, development, and demonstrations. The Proposal was discussed in all EU bodies and approved of in the so-called Partial General Approach (i.e. without the budgetary consequences) by the Competition Council in November 2005. The Proposal will be further discussed in bodies of the European Parliament. It is assumed that all approving procedures should be finalised at the date, which would allow for the first calls on project proposals filing at the beginning of 2007. Whereas the so-called financial perspective of EU for the period 2007–2013 (the budget) has been approved in the second half of December 2005, the budgetary information on framework programmes show the intention of the European Commission – 72 726 million euros. The budget of the 7th Framework Programme will thus be further discussed. The

proposal of the 7th FP is included in the document by the European Commission COM (2005), 119 the final of 6 April 2005. Suggested specific programmes have been publicised at the same time, but they have been still in the stage of negotiations in December 2005.

8.2.2.1. Structure of the 7th Framework EU Programme

The 7th Framework EU Programme has been divided, according to the approved proposal and the contents, into four areas: **Co-operation, Ideas, Capacities, and People**.

Co-operation: This will include own research activities and it relates to the entire area of research activities taking place within the transnational co-operation. There are the following priorities:

- Health, food, agriculture, and biotechnology
- Information and communication technologies
- Nanoscience, nanotechnologies, materials, and new manufacturing technologies
- Energy
- Environment (including changes in the climate)
- Transport (including aeronautics)
- Social-economic science and humanities
- Safety and universe.

Ideas: It is the support of the basic (border) research of the "investigator-driven" – the bottom up – research implemented in all disciplines by individual or transnational teams. It should make a base for the applied research and innovation on the "bottom up" principle and for the establishment of the European Research Council.

Capacities: There will be the key aspects of European research and innovation capacities like, for example, research infrastructures, clusters at the regional level, and the development of the full potential of the convergence within the Community and in outside regions supported. It will be also the support of research done for the benefit of small and medium-size enterprises, the development of relations between science and the society, the development of policy coherences, and horizontal activities within the international co-operation. European research infrastructures, their construction and operations will be also supported within this part of the Framework EU Programme.

People: This is about the strengthening of the quantitative and qualitative aspects of the human potential in research and technical development in Europe. It will be the support of human resources in research and development, including the support of researchers' careers, the support of young researchers and women working in research. This will include also the Marie Curie activities.

8.2.2.2. Participation rules and instruments in the 7th Framework EU Programme

All topics will be implemented through the following: Collaborative research, joint technological initiatives (JTI), co-ordination of research programmes, and the international co-operation. The following instruments will continue to be used for the support: "Grants for the integration" (the excellence networks) and "Grants supplementing the

budgets" (the integrated projects). The European Commission does not define categories of the recognised costs anymore. Teams gain funds for project solutions in the form of advances to eliminate delays, which were the feature of payments done by the European Commission within 5th FP. Partnership changes in solutions (additional partners or leavings) can be decided directly by partners without the prior approval by the Commission. Candidate countries associated with framework programmes can participate under the same conditions as the EU member countries. The European research organisations (e.g. CERN, ESA, EMBO, etc.) will be considered legal persons from the member countries. The rights related to the intellectual property will be formulated directly by the partners in the so-called Consortium Agreement, the conclusion of which makes one of the conditions on the gaining of a contribution by the European Commission.

Who may participate? The answer is each legal person. However, there will be the new countries (Romania, Bulgaria, Croatia, and Turkey). They will participate under the same terms as those applying for the member countries. International European organisations will be considered the member countries.

The minimal number of partners will be as follows: Three partners for integrated projects and for the networks of top workplaces – two of them must be from the EU member countries or associated countries. In other cases: Two partners – one participant must be from the member or associated country. The participation of a single participant is possible in the case of scholarships and specific supporting activities. The minimal number of participants can increase in work programmes.

The following instruments will be utilised in the implementation of the framework programmes:

– **Workplaces' integration in the form of Network of Excellence** (it has been stressed that they do not have to be top workplaces at the beginning, but the "excellence" occurs through their integration). The "Network of Excellence" instrument will be implemented in the form of joint programmes covering a part or all research capacities of the participants in the given area with the objective to achieve the critical level of expertise and the European value added. The joint programmes can be focussed on the creation of independent virtual centres. The objective is to achieve a significant integration of research capacities and long-term and multi-disciplinary goals. The networks will be implemented with the aid of joint activity programmes. There should top virtual centres occur. It would be also beneficial if a certain level of autonomy management were achieved with the aid of the progressive integration of work programmes. This all will be based on calls on the project proposals presentation.

– **Integrated projects** must include a number of parts of the form of activities, the size and structure of which can change, according to task kinds. The integrated projects must include research, technical development and/or demonstration activities supporting innovations. The integrated projects should support competitiveness or they should focus on main social needs. The integrated projects should result in usable products, processes, or services. This all should be running within a significant autonomy of solution consortia. The implementation will take place on the basis of general financial plans.

– **The ERA-NET network scheme**. They are jointly implemented programmes (the joint implementation of national or regional programmes – Article 169 in the

Agreement), e.g. with the aid of harmonized work programmes, joint or co-ordinated calls on the project proposal presentations. Specific implementation structures will be important for the implementation. This instrument can be utilised in all activities within the framework programmes.

- **Specific target-oriented research projects (STREP)**
- **Research and technological projects, demonstration projects, and classical projects**
- **Specific research projects for small and medium-size enterprises (MSE) (the co-operation research)**
- **Collective research projects for consortia of small and medium-size enterprises**
- **Support and development actions related to human resources and the mobility**
- **Co-ordination actions**
- **Specific support actions**
- **Integrated initiatives in the infrastructure**
- **Community participation in programmes organised by several member countries (Article 169 in the Agreement).**

The new instruments – Excellence Networks, integrated projects and jointly implemented programmes – will be used immediately from the start of framework programmes as the priority instruments. However, traditional mechanisms are also maintained – specifically targeted research projects (STREP) and co-ordination actions.

8.2.3. 7th FRAMEWORK PROGRAMME EURATOM

The European Commission presented the proposal of the 7th Framework Programme EURATOM in April 2005 similarly as the 7th Framework EU Programme. However, it has been for the period 2007–2011. The Framework Programme EURATOM was not subjected to the joint decision of the European Parliament and the Council. It was decided by the Council only. With regard to the budget, the same information, as presented for the Framework EU Programme, applies also on the Framework Programme EURATOM – the originally proposed budget – Framework Programme EURATOM: 4 734.621 million euros.

8.2.3.1. Structure of the 7th Framework Programme EURATOM

The implementation of the programme assumes a significant simplification. The programme should cover one specific programme and direct actions by joint research centres.

The specific programme "Nuclear research and education"

- **Topical priority "Research of the energy from the nuclear fusion"**

To develop the knowledge base for ITER and to implement ITER as the safe prototype reactor for power plants. The priority will cover the following activities: Implementation of ITER, the research of the preparation of ITER operations, technological activities within the DEMO preparation, the research activities of the long--term character, human resources, education and training, the infrastructure, and the responses to possible not envisaged political aspects.

- **Topical priority "Nuclear fission and the protection against radiation"**

To support the safe utilisation of a nuclear fission and of other radiation utilisations in the industry and medicine. The priority will cover activities within the following areas: Management of the radioactive waste, reactor systems, the protection against radiation, the support of the infrastructure for the research and access, human resources and training, including the support of mobility.

Direct actions by Joint Research Centres (JRC)

In the consequence of the Lisbon Agenda and requests by many clients, JRC will organise significant effort in the area of education, training, and knowledge dissemination. JRC will implement research activities in the areas related to the waste management, the impact on the environment, and also traditionally in the area of the nuclear safety.

8.2.4. INFORMATION TREATMENT OF THE FRAMEWORK PROGRAMMES

The management of this extensive and complex research and development programme – the Framework EU Programmes – must get an information background.

Information materials are printed, but they are also available on the Internet. The well-known information periodical publications are as follows:

RTD Info (Magazine for European Research) issued monthly. It is also accessible on-line at the address ***http://europa.eu.int/comm/research/rtdinfo.html***.

CORDIS focus published fortnightly. It is also accessible on-line at the address ***http://www.cordis.lu/focus/en/home.html***.

The most extensive and probably the best electronic information system, covering research and development in Europe, is CORDIS (Community Research and Development Information Service) – ***http://cordis.europa.eu.int***.

A new web Articles on Innovation (***http://aoi.cordis.lu***) has been established for the information about innovations at the beginning of 2005.

ECHO – the journal for the European research, development, and innovation. It has been published by the Technological Centre of AS CR since August 2004. It is published six times in a year and it is also accessible on-line at the address ***www.tc.cz***.

There was the National Contact Organisation – Technological Centre of AS CR, appointed for the 6th Framework Programme and we assume that this will happen also in the case of the 7th Framework Programme. Detailed information on the role of the National Contact Organisation was presented in past issues of the "Guide" and it is also accessible at ***http://www.6rp.cz***.

8.2.4.1. National Information Centre for the European Research (NICER)

NICER is a project by the Technological Centre of the Academy of Science of the Czech Republic (OK 448) providing for the complex support of Czech workplaces in their involvement in the European Research Area (ERA).

The Technological centre of AS CR procures within the NICER project the following activities:

- Activities of National Contact Personnel (NCP) for the 6th Framework EU Programme, who organise mass information and training actions related to the 6th FP and provide for professional consulting to individual teams, which participate in preparation and solution of specific 6th FP projects. Special attention is paid to small and medium-size enterprises,
- Management of the financial system supporting the preparation of big 6th FP projects,
- Publishing of ECHO – bimonthly journal focussed on information about ERA and the publishing of publications focussed on the 6th FP and 7th FP issues,
- Operations of the CzechRTD.info portal informing foreign workplaces about research and development structures in the Czech Republic. It also enables Czech teams to publicise suggestions of the European co-operation in specific areas of research, development, and innovation (***www.czechrtd.info.cz***),
- It is interconnected, through NCP activities, with the European National Contact Points' Network for the 6th FP and with the National Information Network NINET and other contact places in the Czech Republic. It thus contributes to the creation of relations between the local workplaces and ERA,
- Co-operation with the European Commission and with Czech representatives in programme committees within the 6th FP and in the COST programme.

  For more detailed information, see ***http://www.nicer.cz***.

8.2.4.2. Czech National Information Network for the framework EU programmes – NINET

The national information infrastructure for the 6th Framework EU Programme NINET (National Information NETwork) has become active during 2000 in order to ensure the successful participation of the Czech Republic in projects of the international co-operation in R&D. NINET is currently the Czech National Information Network for the framework EU programmes, which associates regional and professional contact organisations in the Czech Republic. The objective of the NINET network is the provision of information and consulting services, especially related to the research and development framework EU programmes. The network is financially supported by MEYS resources. For further information see ***www.ninet.cz***.

NINET associates regional contact organisations (RKO) and professional contact organisations (OKO). Their list is presented in **Table VIII**.

Table VIII. – National contact organisations, RKO and OKO

National Contact Organisations (NKO)		
Praha OK 448	**Technological Centre AS CR** Rozvojová 135 160 28 Praha 6	**RNDr. Vladimír Albrecht, CSc.** tel.: +420 234 006 106 fax: +420 220 921 217 e-mail: albrecht@tc.cas.cz
Regional Contact Organisations (RKO)		
Brno OK 454	**Brno University of Technology** Antonínská 1 601 90 Brno	**Prof. RNDr. Josef Jančář, CSc.** tel.: 541 145 209 e-mail: prorektor-vyzkum@vutbr.cz
České Budějovice OK 442	**Institute of Systemic Biology and Ecology of AS CR** Poříčí 3b, 603 00 Brno	**Prof. RNDr. Michal Marek, DrSc.** tel.: 543 211 560 e-mail: emarek@brno.cas.cz
Liberec OK 444	**Research Institute of Textile Machines Ltd.,** U Jezu 4 461 19 Liberec	**Ing. Jaromír Ficek** tel.: 485 302 486 e-mail: jaromir.ficek@vuts.cz
Most OK 445	**Research Institute of Brown Coal Ltd.** Budovatelů 2830 434 37 Most	**Ing. Karel Bořecký** tel.: 476 208 676 e-mail: bic@vuhu.cz
Ostrava OK 443	**BIC Ostrava, s.r.o.** Mostárenská 38 703 00 Ostrava-Vítkovice	**Ing. Marek Valdmann** tel.: 595 957 458 e-mail: valdman@bicova.cz
Pardubice OK 447	**VÚOS, a.s. Pardubice** (Research Institute of Organic Syntheses) 532 18 Pardubice 20 Rybitví 296-CETA	**Ing. Vratislav Černý** tel.: 466 825 646 e-mail: vratislav.cerny@vuosas.cz
Plzeň OK 450	**University of West Bohemia in Plzeň** Department of management, innovation, and projects Husova11, 306 14 Plzeň	**Ing. Jiří Vacek** tel.: 377 633 204 e-mail: vacekj@kip.zcu.cz
Olomouc OK 435	**Palacky University in Olomouc** Křížkovského 8 771 47 Olomouc	**Mgr. Hana Štoselová** tel.: 585 631 400 e-mail: stoselo@risc.upol.cz
Praha OK 451	**ČVUT Praha** Enterprising and Innovation Centre Plzeňská 221/130 150 00 Praha 5	**Ing. Pavel Komárek, CSc.** tel.: 257 21 28 73 e-mail: komarek@bic.cvut.cz
Professional Contact Organisations		
Praha OK 452	**Confederation of Industry and Transport of the Czech Republic** Mikulandská 7 113 61 Praha 1	**Ing. Stanislav Lička, CSc.** tel.: 224 934 843 e-mail: slicka@spcr.cz

Praha OK 446	**Czech Society for New Materials and Technologies** Novotného lávka 5 116 68 Praha 1	**Doc. Ing. Karel Šperlink, CSc.** tel.: 221 082 326 e-mail: sperlink@aipcr.cz
Praha 1P OK 457	**Nuclear Research Institute in Řež Ltd.** 250 68 Řež	**Prof. Ing. František Klik, CSc.** tel.: 266 172 000 e-mail: Kli@nri.cz; kli@ujv.cz
Praha OK 449	**Aircraft Research and Testing Institute Ltd.** Beranových 130 199 05 Praha	**Ing. Karel Paiger** tel.: 225 115 332 e-mail: paiger@vzlu.cz
Praha OK 437	**Sociology Institute of AS CR** Jilská 1 110 00 Praha 1	**PhDr. Marie Linková** tel.: 222 222 322 e-mail: marcela@zenyaveda.cz
Praha OK 439	**Association of Research Organisations** Novodvorská 994 142 21 Praha 4	**Ing. Václav Neumajer** tel.: 239 041 998 e-mail: avo@avo.cz
Praha OK 440	**Engineering Academy of the Czech Republic** Národní 3 117 00 Praha 1	**Ing. Ivan Dobiáš, DrSc.** tel.: 286 890 383, 286 890 391 e-mail: idob@it.cas.cz
Praha OK 458	**Institute of Theory of Information and Automation of AS CR** Pod vodárenskou věží 4 182 08 Praha 8	**Ing. Jiří Kadlec, CSc.** tel.: 266 052 216 e-mail: kadlec@utia.cas.cz
Brno OK 455	**VIP park.cz, s.r.o.** Bulharská 37 612 00 Brno	**Ing. Vlastimil Veselý** tel.: 541 147 250 e-mail: vesely@park.cz
OK 318	**Engineering Academy of the Czech Republic** Národní 3 117 20 Praha 1	**Prof. Ing. Vladimír Kučera, DrSc.** tel.: 224 352 850 e-mail: kucera@fel.cvut.cz
OK 456	**BIC Brno** Příkop 4 602 00 Brno	**Ing. Vít Hřiba** tel.: 545 176 130 e-mail: bicbrno@bicbrno.cz, circ.rko@bicbrno.cz.
OK 460	**Charles University in Praha – MICEP** Karlovo nám. 4 – Faustův dům 120 00 Praha 2	**Doc. Ing. Miloslav Špunda, CSc.** tel.: 224 963 010 e-mail: spunda@cuni.cz
OK 464	**Technological Centre of AS CR** Rozvojová 135 160 28 Praha 6	**RNDr. Vladimír Albrecht, CSc.** tel.: 234 006 106 e-mail: albrecht@tc.cas.cz
OK 465	**Centre of Joint Activities of AS CR** Národní 3 110 00 Praha 1	**Jindra Emmerová** tel.: 221 403 249 e-mail: emmerova@kav.cas.cz

8.2.5. CONTACTS IN THE CZECH REPUBLIC

The place of contact and the information resource for framework programmes in the Czech Republic:

Technological Centre AS CR
Rozvojová 135, 165 02 Praha 6
Tel.: +420 234 006 100
Fax: +420 220 921 217, +420 220 922 698
e-mail: ***techno@tc.cas.cz***

Dr. Miloš Chvojka, CSc
Department of the international co-operation in research and development of MEYS CR
Karmelitská 7, 118 12 Praha 1
Tel.: +420 257 193 511
Fax: +420 257 193 713
e-mail: ***milos.chvojka@msmt.cz***

8.3. LIAISON INFORMATION OFFICE OF THE CZECH REPUBLIC IN BRUSSELS – CZELO

There has been a Liaison Office of the Czech Republic, the so-called CZELO, established in Brussels in 2005. This office should improve the information flow between the European Commission and the Czech research professionals. Many other member countries have got similar offices in Brussels. The address of the office is as follows: Czech Liaison Office for R&D, Bastion Tower, Level 21, 5, Place du Champ de Mars, B-1050 Brussels, Belgium. The Office Manager is Dr. Ivo Šanc, CSc. – Tel.: +322 550 3785, e-mail: ***sanc@tc.cas.cz***. CZELO is a project by the Technological Centre of AS CR supported by the grant of the National Research Programme I managed by MEYS. The main task of CZELO is to help in the successful involvement of the Czech research in the European research co-operation, especially through framework programmes. The office provides for services to researchers from all different areas and research organisations in the Czech Republic. For further information, see the web: ***http://www.czelo.cz***.

8.4. MULTILATERAL GOVERNMENT CO-OPERATION

8.4.1. PROGRAMME COST

COST (European Co-operation in the Field of Scientific and Technical Research) is the European multilateral co-operation in the area of research and development focussed on the exploratory and applied research. The Czech Republic has become a member of COST in 1993. COST co-ordinates research and development with the so-called Actions, in which scientific and research workers from COST member countries can become involved with their own projects. The rule of the organisation and work in the COST programme is the use of the "bottom-up" principle. The actions are proposed by scientific and research workers. The top managing body is the Committee of High COST Representatives, in which all member countries of COST, the European Commission, the EU Council (its secretariat), and the European Science Foundation are represented. The top body of COST is the Congress of the member countries' ministers responsible for research. The congresses are usually organised after the period of five years. The recent congresses were in Praha (1997) and in Croatian Dubrovnik in May 2003.

The total number of actions exceeded 200 in 2005 (the number changes during a year because some actions finalise, while some new ones start). About 40 000 scientists from 32 European member countries and 50 science-research institutes from 14 other countries participated in the work.

COST has closely co-operated with the European Science Foundation, on the basis of an agreement concluded between COST and ESF, since 2003. ESF had received, on the basis of the project, funds from the 6th Framework Programme for the support of COST Office (the address of the COST Office: COST Office, 149 Avenue Louise, 1050 Brussels, Belgium, Office Director is Dr. Martin Grabert, Tel.: +322 533 3810, Fax: +322 533 3893, e-mail: ***mgrabert@cost.esf.org***, the COST Secretariat is supported by the General Secretariat of the EU Council) and other COST activities.

Management Committees of the Actions: The actions are co-ordinated by the so-called Management Committees. These committees include representatives of the member countries, which have accessed an action in the form of signing the so-called Memorandum of Understanding (see farther). The member countries participate in actions in the form of the so-called projects. When an action commences, the projects are assessed by the Technical Committee. The Management Committee decides on other application acceptation (after one year from the action commencement).

Technical Committees: The Technical Committees are established in some areas – Materials, Telecommunication, Transport, Social Science, Chemistry, Meteorology, Forests and Forest Products, Municipal Building Engineering, Agriculture, Food Industry and Biotechnology, Physics, Neuroscience, Nanoscience, Environment, and Medical Science. TC members representing the Czech Republic make up the ad hoc COST Committee in the Czech Republic. The Committee deals with proposals and recommendations on the division of funds determined for COST project subsidies in a given financial year and it decides on the conception of scientific or organisational activities related to the participation of the Czech Republic in the COST programme.

The Technical Committees will be abolished in June 2006 and replaced with the so-called domains. There will be the so-called Domain Committees established in the following domains:

1. Biomedicine and Molecular Biosciences – BMBS
2. Food and Agriculture – F&A
3. Forests, their Products and Services – FPS
4. Materials, Physical and Nanosciences – PHYMANO
5. Chemistry and Molecular Science and Technologies – CHEMOL
6. Earth System Science and Environmental Management – ESSEM
7. Information and Communication Technologies – ICT
8. Transport and Urban Development – TUD
9. Individuals, Society, Culture and Health – INSOCH

Memorandum of Understanding (MoU): This is the document of the character of an international agreement, which, in the so-called Technical Annex, formulates actions from the professional and legal points of view. MoU binds the signatories, inter alia, to provide all results achieved during solutions to all other signatories of the relevant MoU. On behalf of the Czech Republic, the Memorandum is signed by the Manager of the Permanent Representation of the Czech Republic in the European Community on the basis of an authorisation by MEYS CR.

The participation in COST takes place in the form of accession to the existing COST action (especially at the action beginning) or in the form of a COST action proposal (the period between the filing of the proposal and the action approval is usually one year). Details are presented on the MEYS web pages related to the international co-operation in research and development and on the COST web.

The funding of research fundamentally takes place at a national level. COST does not have any funds for the research funding of its own. However, there are funds for the research co-ordination – the coverage of COST body meetings – reimbursements, the COST Office and Secretariat activities, and also the so-called Short Scientific Mission. The projects have been partly target-funded from the state budget of the Czech Republic since 1993. The funds are provided by MEYS on the basis of recommendations by the advisory COST body in the Czech Republic. The Management Committees of the COST actions assess the projects.

8.4.1.1. Research areas within COST

It has been already said above that more than 200 actions (research programmes) currently run within COST in 17 areas. Each action has got its own history since the COST establishment in 1971.

Research areas – until June 2006 – the change into domains will take place then (as described above):

- Informatics
- Telecommunications
- Transport
- Oceanography
- Materials
- Environment
- Meteorology
- Agriculture and Biotechnology
- Food Research
- Information Technologies

- Social Sciences
- Medical Research
- Construction Industry
- Chemistry
- Forestry and Forest Products
- Physics
- Flow Dynamics

In addition, COST organises also activities within the areas of nanotechnologies and biomaterials. There have been special work groups established in COST.

8.4.1.2. Representation of the Czech Republic in the Committee of High Representatives of COST

National COST Co-ordinator:
Dr. Miloš Chvojka, CSc.
COST Secretariat in the Czech Republic, MEYS CR
Karmelitská 7, 118 12 Praha 1
Tel.: 257 193 511, Fax: 257 193 713
E-mail: ***milos.chvojka@msmt.cz***
Member of the Committee of High COST Representatives:
Prof. RNDr. Jaroslav Cihlář, CSc.
Technická 2, 601 90 Brno
Tel.: 541 321 277, Fax: 541 211 309
E-mail: ***cihlar@umi.fme.vutbr.cz***

8.4.1.3. Administrative management of the programme COST

The administrative management of the programme COST is organised by the Technological Centre of AS CR, Rozvojová 135, 165 02 Praha 6. The responsible person is Ing. Bedřich Pekárek, Tel.: +420 257 193 708, Fax: +420 257 193 713, e-mail: ***bedrich.pekarek@msmt.cz***, in co-operation with RNDr. Josef Janda (MEYS), Tel.: +420 257 193 720, Fax: +420 257 193 713, e-mail: ***josef.janda@msmt.cz***

8.4.1.4. COST – Internet addresses

http://www.cost.esf.org/
http://www.msmt.cz

8.4.2. PROGRAMME EUREKA – EUROPEAN CO-OPERATION IN THE AREA OF APPLIED AND INDUSTRIAL RESEARCH AND DEVELOPMENT

The programme EUREKA started in 1985 with the aim to support co-operation in between industrial businesses, research institutes and universities and to create, in this way, conditions for better technological advancement and performance of the European industry, to develop its common infrastructure, and to resolve problems related to more countries. The EUREKA projects serve civil purposes and they are focussed on the area of private and public sectors. Their outcomes are top products, technologies, and progressive services, which are the market competitive. The objective is the active

involvement of research and development in market economy mechanisms. This means the necessity of the commercial utilisation of the research results.

The EUREKA programme neither determines any topical tasks, neither centralises funding and project selection. It is governed by the principle that proposals and initiatives must come from the bottom (the so-called bottom-up principle), from individual enterprises and research institutes, which are directly interested in the co-operation. That is the reason why total financial costs, project solution periods, the number of solvers, etc. are not limited.

EUREKA currently associates 33 European countries and the European Union is one of the regular members. From among the countries of the Central and Eastern Europe, the following countries are its members: The Czech Republic, Estonia, Croatia, Lithuania, Latvia, Hungary, Poland, Romania, Russia, the Slovak Republic, and Slovenia. The Czech Republic has become a regular member in 1995. There are organisation centres of the programme National Information Points (NIP) in the following countries, which have not been the regular members yet: Albania, Bulgaria, and Ukraine. The Czech Republic chairs the EUREKA programme from July 2005 to June 2006. Italy will chair the programme after the Czech Republic.

8.4.2.1. EUREKA projects' focuses

Topical focuses of the projects have not been limited in principle and they imply from the priorities in the development of industries. The projects have been directed into the following areas:

- Information technologies
- Environment
- Biotechnology and Healthcare technologies
- New materials
- Robotics and Automation
- Communication technologies
- Transport
- Energy
- Lasers

8.4.2.2. Preparations and the co-ordination of EUREKA solutions

A party interested in the project solution within the EUREKA programme can use one of the two possibilities. It can offer the necessary invention and a project topic with the objective to find other partners for the implementation, or it can apply for the solution of an approved project, if the party fulfils the requirements by the proposing party.

The quality preparation of an international project requires the period of 6–8 months. Each project is proposed and managed independently by the participants and it is subjected to minimal administration management.

Project proposals, on the relevant international forms, must be presented through the Secretariat of the National Programme Co-ordinator at any time during the year.

8.4.2.3. Criteria of the EUREKA projects

- Co-operation of enterprises and research organisations from at least two member countries,

- Achievement of a recognised progress (the higher level innovation) in the technological and usable value of the developed product, technological process, or service,
- Perspectives in the market utilisation, financial profit from the project implementation,
- The solution and commercial project utilisation are determined for the civil sector,
- Project participants must have technological, financial and management capacities and competences for the solution.

8.4.2.4. *Funding of EUREKA projects*

EUREKA does not create any financial fund supporting the project solutions. The participation in the projects is covered by the participants, but the co-operation within EUREKA allows for the fast accumulation of funds from private resources, subsidies, or loans from public funds because most member countries, including the Czech Republic, provide for funding possibilities, either from the public or other funds, supporting the participation in the EUREKA programme.

The government of the Czech Republic has decided on the funding support of the participation of industrial enterprises, research organisations and universities in the EUREKA project solutions and it provides funds from the state budget. The support of individual solutions can reach up 50 % of financial costs of the research part of solutions.

Applications for the support with state funds must be presented through the Secretariat of the National EUREKA Programme Co-ordinator.

8.4.2.5. *Organisational structure of the EUREKA programme*

The EUREKA Programme Secretariat, of the registered address in Brussels, organises all necessary activities co-ordinating the EUREKA programme as, for example, the circulation of new projects, or looking for suitable foreign co-operation partners, the publishing of information materials, and the administration of the public database. The EUREKA Secretariat pays its significant attention also to the protection of information, intellectual property, industrial rights, and standardisation.

The National Programme Co-ordinator manages activities of the EUREKA programme in individual member countries and organises all activities related to the programme. The Co-ordinator provides for all necessary information, consulting and advisory services, organises the international project assessments and transfers project proposals to the international network of the EUREKA programme. He also helps in the organisation of the financial support of project solutions.

The EUREKA Programme Council of the Czech Republic is also an advisory body of MEYS. Its members are independent experts from the industry and research. The Programme Council discusses new project proposals, in which Czech organisations participate, and presents its opinion on the presented requirements on the project co--funding from the state budget. The Programme Council members also supervise the projects, the solvers of which are Czech entities.

The governing board of the EUREKA programme is the Group of High Representatives. The Group consists of senior government officers from the member countries and a representative of the European Commission. This board is responsible for the preparation of the basic strategic documents, the exchange of information about possible co-operation areas in between the member countries, the approval of new project proposals, and the assignment of the EUREKA project status.

The highest body of the EUREKA programme is the Congress of Ministers. The Congress is attended by ministers of the member countries and a representative of the EU Commission, who are responsible for the area of research, development and technology. The Congress of Ministers decides on the development, focus and objectives of the programme and on the acceptance of new members.

8.4.2.6. Contact addresses and the Internet

National Programme Co-ordinator (NPC) of EUREKA in the Czech Republic

Ing. Josef Martinec
Ministry of Education, Youth and Sports
Karmelitská 7, 118 12 Praha 1
Tel.: +420 257 193 512
Fax: +420 257 193 713
e-mail: ***josef.martinec@msmt.cz***

Member of the High Representatives' Group (HLG) in the programme EUREKA on behalf of the Czech Republic

Doc. Ing. Karel Šperlink, CSc
President of the Association of Innovative Entrepreneurship of the Czech Republic
Novotného lávka 5, 116 68 Praha 1
Tel./Fax: +420 221 082 326
e-mail: ***sperlink@aipcr.cz***
http://www.eureka.be

8.4.3. SCIENTIFIC NATO PROGRAMMES (CIVIL RESEARCH)

The new phenomenon – terrorism – and especially the attack of 11 September 2001 has resulted in the new challenge for the scientific NATO programme – the effective involvement in the fight against the terrorism. Extensive discussions about the new mission and structure of the programme, which took place in 2002 and 2003, have brought a proposal of the new programme structure, which should better correspond with the current mission and objectives of the Alliance and which would also ensure more efficient utilisation of funds, thanks to the new way of funding. There was also the basic issue of the legitimacy of the civil scientific programme within the defensive military alliance discussed. The conclusions were unequivocal: Such a programme is legitimate, if it corresponds with the main current Alliance objectives – the defence against terrorism, the prevention of further security threats, and priorities of partner countries. The programme has been restructured in 2004 and the activities have followed the new structure since 2005. More detailed information about the restructured Scientific NATO Programme is available on the web "NATO Science Programme" at the address: ***http://www.nato.int/science***.

8.4.3.1. Structure of the Science Programme

The change in the focus of the NATO Science Programme on security has required a complete fundamental programme restructuring. The new programme called "Security through Science" still focuses on making contacts among the scientific community of the NATO member countries and scientists in partner countries and the countries within the so-called Mediterranean Dialogue (the countries in North Africa, Israel, and Jordan). However, it requires, from the supported activities, to include security orientation. As it has been already mentioned in the introduction, the priority topics of the research will be selected within the following three main areas:

- Protection against terrorism
- Prevention of further security threats
- Priorities of the partner countries.

The structure of advisory panels has been replaced in 2004 as follows:

- Chemistry / Biology / Physics (CBP) Panel
- Information and Communications Security (ICS) Panel
- Environmental Security (ESP) Panel
- Human and Societal Dynamics (HSD) Panel.

8.4.3.2. NATO Science Fellowships Programme

One of the sub programmes within the NATO Science Programme was the "Science Fellowships Programme" organised in a decentralised way through the national programmes of individual NATO member countries, i.e. each member country received a certain volume of funds, according to the beforehand determined key, and the national offices, authorised to administer the programme in the individual NATO member countries, then used them for the study stays of their researchers in other NATO member countries or partner countries, or for the support of study stays of scientists from the partner countries in the NATO member countries.

The newly focussed restructured programme has been fundamentally changed also in this area. The NATO Science Fellowships Programme will focus in future exclusively on the partner countries and will utilise new support forms, which should make the utilisation of funds more effective. The national programmes of the individual member countries have been finalised at the end of 2005 and the programme will be administered in the central way – in Brussels.

8.4.3.3. Contacts and information

Milada Glogarová, prom. fyz. CSc., the Deputy Director of the Institute of Physics of AS CR, has been appointed the representative of the Czech Republic in the NATO Science Committee. She could be contacted at the following address:

Milada Glogarová, prom. fyz. CSc.
Deputy Director
Institute of Physics of AS CR
Na Slovance 2, 181 21 Praha 8
Tel.: 266 052 708
e-mail: ***glogar@fzu.cz***

Information could be accessed also at the following addresses:

http://www.nato.int/science
http://www.msmt.cz

8.4.4. CO-OPERATION WITH ESA

The European Space Agency (hereinafter called "ESA" only) is an international intergovernmental organisation for the development in the space research and of the space technologies, which was founded by the Treaty of 30 May 1975. The Treaty has become valid on 30 May 1980. ESA acts as an equal partner of other important space agencies as, for example, the American NASA, Japanese NASDA, the Indian Agency, Russian Agency, and others. There are currently the following 14 European countries full ESA members: Belgium, Denmark, Finland, France, Ireland, Italy, Germany, the Netherlands, Norway, Austria, Spain, Sweden, Switzerland, and United Kingdom. A special position of a co-operating member has been given to Canada. In addition, ESA has concluded co-operation agreements with the other following European countries: with Hungary in 1991, Romania in 1992, Poland in 1994, and Portugal in 1996. ESA has concluded the Co-operation Agreement with the Czech Republic on 7 November 1996.

ESA has got its registered address in Paris, where the General Directorate and also the ESA Council – the top body of the organisation consisting of representatives of the member countries, are situated.

In addition to this address in Paris, the agency has got the following top equipped research centres:

The European Space Research and Technology Centre (ESTEC) placed in Noordwijk in the Netherlands. The Centre concentrates research in the areas of space physics and astronomy, micro-gravitation, telecommunications, and the Earth monitoring. The Space Science Directorate is also located in ESTEC, which is the biggest ESA research centre.

The European Space Operations Centre (ESOC) situated in Darmstadt in Germany organises activities of space objects on the orbit. ESOC manages operations of satellites, receives and processes data coming from different scientific experiments (e.g. scientific data, weather information, the Earth imagining, etc.).

The European Space Research Institute (ESRIN) is located in Frascati in Italy, close to Rome. ESRIN is responsible for solving the issues of data gaining, processing and distribution from satellite apparatuses determined for the Earth monitoring.

The European Astronauts Centre is situated in Köln am Rhine. It is responsible for the selection, the assessment of qualification capacities, and the organisation of training of future European astronauts.

The co-operation content is currently extensive and covers the most existing areas of the space research and its applications. Researchers co-operating with ESA have been given subsidies for projects on the basis of tenders announced within the CONTACT Programme since 1996.

Since 1997, there has been the Council for the Co-operation with ESA (RSE) working at MEYS. It has got experts for the following research areas: Space astronomy, space physics, the Earth monitoring, telecommunications and navigation, space

biology and medicine, material processing, the engineering and the Earth segment, and the space legislature. The Council has been an advisory body of MEYS implementing this framework agreement and provisions agreed on by both contractual parties. The Council suggest the co-operation activity forms, assesses presented project proposals, monitors their fulfilment, and helps in dissemination of necessary information about the co-operation possibilities. The Council for the Co-operation with ESA has merged with the National Committee for the Space Research and Utilisation (founded by AS CR in 1998) in 2004. This single body has got clearly determined competences and it is now called the Council for Space Activities. It is an advisory body of MEYS having the status approved by the Directive of the Minister of Education, Youth and Sports.

The framework agreement on the co-operation with ESA allows also for the training and gaining of practical experience by young scientists and post graduates directly in ESA research institutions. Written applications can be addressed to the Secretariat of the Czech Space Office – see farther. Similarly, the registration of a contact address of a workplace can be made free of charge within the official Catalogue of space institutions existing in Europe, which is published every year in Paris.

There has been an agreement on the accession of the Czech Republic to the programme PRODEX concluded in 2000. This scientific programme of the European Space Agency is open to participants from the member countries. The parties can apply for the participation in running projects, or propose their own projects. The funding of the Czech participation in the programme PRODEX has been based on the principle of "juste d'retour" – a contribution corresponding with the scope of the approved Czech participation increased by negligible administration costs. Parties, interested in the entry to this programme, should contact the Ministry of Education, Youth and Sports, or the Council for the Co-operation with ESA, where further information is available.

The ESA Council had adopted a Resolution on the establishment of a special programme for the European co-operating countries in 2001. It has got the working name PECS (the Plan for European Co-operating States) and it allowed for a wider scope of involvement in ESA activities also to perspective non member European countries (the Czech Republic, Hungary, Poland, and Romania) without the risk of over the top economic burden. The participating countries did not pay the member fee, but only a contribution at the level corresponding to their actual participation. They could also access industrial tenders announced by ESA.

The participation of the Czech Republic in ESA programmes envisages the financial contribution at the level of 1 million euros a year. The programme start was envisaged after the finalisation of legislative procedures by the Czech Republic and ESA. Consequently, after the signing of the Agreement on the European Co-operating State between the Czech Republic and ESA, which took place in November 2003, the Agreement had to be approved by both Houses of the Czech Parliament. This Agreement has replaced the previous treaty, concluded in 1996.

There was a tender on the presentation of project proposals and on the participation of Czech entities in ESA projects announced within the programme PECS in 2004. The presented proposals, from academic workplaces, but especially from industrial businesses, will be assessed and the so-called "PECS Programme Document"

will be prepared. It should list all approved participation of Czech researchers in ESA programmes, including the levels of this participation cost. ESA workers visited a number of Czech businesses, in 2002, the activities of which related to the space research and technologies. They published a report on different aspects of the Czech industry readiness for this kind of co-operation. The Space Council, consisting of representatives of the EU and ESA member countries, also takes its interest in the space research. The Space Council tries to co-ordinate activities by the EU and ESA member countries.

8.4.4.1. Contacts and information:

1) **EUROPEAN SPACE AGENCY**
   Headquarters:
   8-10 rue Mario Nikis
   F-75738 Paris Cedex
   FRANCE
   tel.: +33 (0) 1 53 69 76 54
   fax: +33 (0) 1 53 69 75 60/61/62
   http://www.esa.int

2) **Czech Space Office**
   Kateřinská 10
   128 00 Praha 2
   Tel.: +420 224 918 288
   Fax: +420 224 914 121
   e-mail: ***jan.kolar@czechspace.cz***
   http://www.czechspace.cz

3) ***http://www.msmt.cz/***

8.5. OTHER MULTILATERAL CO-OPERATION

8.5.1. THE EUROPEAN SCIENCE FOUNDATION – ESF

ESF supports high quality scientific activities undertaken within the entire Europe. It is a European association of national organisations responsible for the funding support of scientific research (e.g. by grant agencies). The Foundation was founded in 1974 and it associated 78 member organisations in 2005 (scientific institutions, academies, grant agencies, etc.) from 30 countries. ESF is a non government institution, despite the fact that its members are often organisations funded mostly by governments. ESF closely co-operates with the European Commission in the area of science.

ESF's task is to mediate and make contacts of scientists from different countries easier in order to ensure co-operation within important projects related to their mutual interests. The co-operation should allow for more general utilisation of big and costly facilities and new research directions should be established on the basis of achieved scientific results.

ESF works continuously, in co-operation with its member organisations, on the development of the science policy, which is strategically important for Europe. ESF is involved in so-called EUROCORES – science projects involving the international participation – in the area of international co-operation in research and development.

The Grant Agency of the Czech Republic and the Academy of Science of the Czech Republic have been the ESF member organisations since 1999.

ESF closely co-operates also with COST and it organises activities of the COST Office – see the information about the COST programme.

The annual member contribution of the Czech Republic (i.e. the Grant Agency of the Czech Republic and the Academy of Sciences of the Czech Republic together) is about 45 000 euros. The membership costs of the Czech Republic in the European Science Foundation are covered with the subsidy by the Ministry of Education and Youth and Sports from the budget determined for the international co-operation in research and development.

Detailed information about the European Science Foundation is available on the ESF home web: ***http://www.esf.org*** and ***http://www.gacr.cz/gacr/Zakl_ramec.htm***

8.5.2. INTAS

INTAS – the International Association for the Support of Co-operation in Science and Research with the former states of the Soviet Union and Russia. The Czech Republic has become a regular member of the international organisation INTAS in 2001. The Technological Centre of the Academy of Science of the Czech Republic has been assigned the task of co-ordination. The contact web page is: ***http://www.intas.be***/. The Czech representatives in the so-called INTAS General Assembly are as follows: Ing. Emil Kraemer, CSc. from the Technological Centre of AS CR, e-mail: ***kraemer@tc.cas.cz***, Tel.: +420 234 006 112, Fax: +420 220 922 698. INTAS supports the co-operation utilising the bottom-up approach within the entire scope of sciences, from the theoretical physics to economic and social sciences and humanities in the form of research projects. It supports networking, research infrastructures, conferences, summer camps, and different kinds of scholarships for young scientists. INTAS is

supported with funds from the budget of the framework EC programmes. The project funding is provided after their evaluation from the INTAS budget. Further information is available at the above-mentioned addresses of INTAS and TC AS CR, and also on the addresses ***http://www.msmt.cz*** and ***http://www.tc.cas.cz***.

8.5.3. EMBC

EMBC – The European Molecular Biology Conference. The Czech Republic has accepted the Founding Agreement of EMBC in 1994 and become a regular member in 1995.

EMBC is an intergovernmental organisation organising the basic research co-operation of European countries in molecular biology and in related scientific fields. The agreement establishing EMBC was executed in February 1969 by France, Germany, the Netherlands, Norway, Sweden, Switzerland, Great Britain, Austria, and Denmark. Other European countries and Israel have progressively acceded to the Agreement. There are currently 24 members. Activities of EMBC are governed by the General Programme, which covers especially the assignments of research scholarships, the preparation of study course programmes, workshops, and symposiums.

Study stays, both long-term, or one or two year ones and short-term ones make the most important form of the co-operation for the Czech scientific community. Each candidate interested in some of the study stay forms must present his or her own project, which is then assessed by experts and the acceptance or refusal is exclusively governed by the importance and originality of the project.

Application forms, detailed information and records from EMBC meetings are at the disposal in the Department of international co-operation in research and development, Ministry of Education, Youth and Sports, Karmelitská 7, 118 12 Praha 1, Tel.: +420 257 193 242, Fax: +420 257 193 713. Further information is available also at the EMBC web page: ***www.embo.org/embc***.

8.5.4. OECD

OECD – Organization for Economic Co-operation and Development. The executive body of OECD in the area of research and development is the Directorate for Science, Technology, and Industry (DSTI), within which there are the three following closely co-operating committees: Committee for Science and Technology Policy (CSTP), Industry Committee (IC), and Information, Computer and Communications Policy (ICCP).

Basic priorities of DSTI in the near future are made by trends in the science and technological policies of OECD member countries, the knowledge-based economy, the globalization, and the international co-operation.

The work programme of CSTP consists mainly of the preparation of regular reports on the industrial and technological policies of the member countries (Science, Technology and Industry Outlook), the review of scientific and technological policy of the selected country (Country Review), and the review of selected specific issues in member countries (Thematic Review). It includes also the co-ordination in the area of statistical data covering science and technology, the monitoring of structural changes in economical performances, economic competition, and innovative systems in the member countries.

The main focus of the Ministry of Education, Youth and Sports within the co-operation with OECD in the area of research and development is focussed on the own activities of CSTP and on the work in work groups of this committee. They are the Working Group on Global Science Forum, the Working Group on Innovation and Technology Policy, and the Working Party on Biotechnology.

The Ministry of Education, Youth and Sports also participates in the co-ordination, together with other central authorities, of activities by the following working groups within CSTP: The Group of National Experts on Science and Technology Indicators, which are organised by the Czech Statistical Office, and the Joint Expert Group on Technology, Productivity, and Job Creation, which is organised by the Ministry of Labour and Social Affairs.

The meeting of CSTP Committee at the ministerial level took place on 29 and 30 January 2004. The Committee, in a consensus of all member countries, prepared for the ministers' meeting the three following key topics: "Managing the science – innovation interface", "Meeting the challenges for human resources in science and technology", and "International co-operation in science and technology".

The activity called International Neuroinformatic Co-ordination Facility (INCF) has started with the initiative contribution of the Czech Technical University (ČVUT) at the end of 2005. It associates world renowned important experts on this issue and on its technological security applications. In addition, there have been activities in the area of nuclear safety supported for a number of years, e.g. the participation of the Czech Republic in the programmes ROSA, HALDEN, and others.

Further information is available at the address ***http://www.oecd.org***.

8.5.5. CERN A SÚJV DUBNA

Czech Republic is also a member of CERN and SÚJV Dubna – the international organisations researching the areas of nuclear and sub nuclear physics and the physics of elementary particles and high energy. The co-operation is managed by the Committee for the CERN Co-operation and the Committee for the Co-operation with SÚJV Dubna. Prof. Jiří Niederle, DrSc. from the Institute of Physics of the Academy of Sciences of the Czech Republic is the chairperson of the CERN Committee and Ing. Rostislav Mach, DrSc. from the Institute of Nuclear Physics of the Academy of Sciences of the Czech Republic is the chairperson of the SÚJV Dubna Committee. Both memberships had been supported with funds by the Ministry of Education, Youth and Sports, the Department 32 – International co-operation in research and development, until 2004. The CERN and SÚJV Dubna projects have been partly supported also with the INGO programme.

Since January 2004, the participation of Czech institutions in important CERN programmes, e.g. ATLAS, ALICE, KOMPAS, and some others, has been financially supported with target-oriented funds of the Ministry of Education, Youth and Sports within the National Research Programme I – the partial programme "International Research and Development Co-operation". Information is available from RNDr. Miloš Chvojka, CSc. (***milos.chvojka@msmt.cz*** – organisation affairs) and Mgr. Martina Hanžlová (***martina.hanzlova@msmt.cz*** – the financial support). Further information is available, for example, also at the addresses: ***http://www.cern.ch*** and ***http://www.hep.fzu.cz/***.

8.5.6. CENTRAL EUROPEAN INITIATIVE – CEI

There are scientific technological projects (a very limited number), which focus on issues important and typical for the Central European region, supported within the science and technology group. Italy chairs the Subcommittee and the Czech representatives are Ing. Petr Křenek, CSc. and RNDr. Josef Janda, from the Department of research and development co-operation – the Ministry of Education, Youth and Sports. The Subcommittee sits in Trieste, in Italy.

A call on the presentation of project proposals from within the area of nanoscience took place within CEI in mid 2005. It was announced within the international competition NANOCHALLENGE organised by the VENETO NANOTECH from Padova (***www.nanochallenge.com***). The call addressed students, university graduates, scientists, professors, but also entrepreneurs, employers, innovators, and development workers in the areas of the basic and applied research. The organisers received 70 applications from companies from 30 countries around the world. An enterprise from Singapore has won.

The contact address is: ***http://www.ceinet.org/index.php***, or
http://www.ceinet.org/view/07/07_05.htm.

Some support is available from the CONTACT programme.

8.5.7. VISEGRAD GROUP

The Visegrad Group has also had a working group for science and technology. The working group meets (the Slovenian Republic is usually also invited) once a year in one of the member countries at the level of ministers or their deputies. It discusses topics related to the exchange of experience and the suggested joint involvement in EU programmes and projects. The group met the last time in Poland in May 2005. It has prepared the joint opinion V4, with Slovenia, on the preparation of framework programmes from the Visegrad Group point of view. The joint projects have not been organised yet.

Further information: ***http://www.visegradgroup.org/***.

8.6. BILATERAL CO-OPERATION

Czech Republic has currently the most important undertakings in the area of research and development co-operation with the following countries (the so-called scientific and technological co-operation agreements): USA, France, Germany, Italy, Japan, Mexico, Greece, Slovenia, Spain, South Korea, Slovakia, People's Republic of China, Hungary, and Poland. In addition, there are a number of other agreements. They are especially the so-called cultural agreements, or trade, industrial, and science and technology co-operation agreements – see further. The Ministry of Education, Youth and Sports of the Czech Republic has been the gestor of organising and fulfilment of scientific and technological agreements.

There are also undertakings resulting from the so-called governmental agreements on the trade, industrial, and scientific and technological co-operation. They have been concluded mainly with the following countries: Belgium, Bulgaria, Finland, France, North Korea (this agreement has not been utilised because of well-known reasons), Hungary, Poland, Romania, and United Kingdom. The Ministry of Industry and Trade of the Czech Republic has been the gestor of the fulfilment of undertakings resulting from these agreements. Agreements are progressively superseded by new ones and there is a trend to resolve the area of research and development independently. In some cases, the fulfilment of these scientific and technological agreements is resolved by the invitation of a representative from the Ministry of Education, Youth and Sports to participate in bodies related to these agreements.

After 1993, there have been some new agreements on the trade, industrial, and scientific and technological co-operation concluded by the government of the Czech Republic with several countries of the former Soviet Union – the Russian Federation, Kazakhstan, Tajikistan, Uzbekistan, Lithuania, Latvia, and Estonia. The so-called "pure science and technology co-operation agreements" have been concluded, after 1993, for example, with the People's Republic of China, South Korea, Mexico, Slovenia, USA, the Slovak Republic, Poland, and Hungary.

Bilateral science and technology co-operation agreements have been accessible, in addition to the area of education and the Academy of Sciences of the Czech Republic, also to all other legal persons active in research and development.

Undertakings in the area of research and development result also from the so-called cultural and scientific co-operation agreements – the Ministry of Foreign Affairs, in co-operation with the Ministry of Education, Youth and Sports (education and science) and the Ministry of Culture, has been the gestor of their fulfilment. The situation in the execution plans related to the cultural agreements (PPKD) is a bit more complicated as they include parts adjusting the scientific co-operation. PPKDs are the results of the co-operation of the Ministry of Education, Youth and Sports and the Ministry of Culture (and in the past also of the Czechoslovak Academy of Sciences, which was the state administration body) with the Ministry of Foreign Affairs in the role of the cultural agreements' gestor. The Academy of Sciences of the Czech Republic has got a new position and a different scope of competences in these PPKDs. The different scope of activities of the Ministry of Education, Youth and Sports in the area of education and in the field of research has been resolved in connection with the contents of programmes supporting the international co-operation in research and development.

We should mention herein also the agreement undertakings, which have been concluded by the Academy of Sciences of the Czech Republic. However, these agreements are not of the nature of government agreements. They are agreements concluded by non-governmental organisations. A number of them have been concluded well before 1989, when they had the character of inter-sector agreement documents focussed especially on the field of basic research.

8.6.1. EU COUNTRIES

In the EU countries, the biggest stress is put on multilateral research and development co-operation within the programmes and organisations like EUREKA, COST, and some others, and on the co-operation within the European Union. However, there are bilateral agreements also concluded by countries belonging to the European Union. The biggest role is played, however, by direct contacts in between subjects, or these co-operation activities are not supported by proper legal acts of the international character. A very specific role is played by co-operation programmes of the European Union – the so-called Framework Programmes for the co-operation in research and development. A special chapter has been assigned to these programmes.

8.6.1.1. Germany

The bilateral agreement on the scientific and technological co-operation with Germany was executed by the governments of the then Czech-Slovak Federation and Germany in 1990 and it transferred, by succession, to the Czech Republic. In 1996, the German Ministry of Education and Research (BMBF) initiated more intensive co-operation and the signing of the Executive Protocol, in which the necessary changes have been anchored. Meetings of the Mixed Commission for the scientific and technological co-operation regularly take place and work is organised for the mutual bilateral Czech-German scientific and technological projects.

At the Czech side, the co-operation is managed by the Ministry of Education, Youth and Sports of the Czech Republic, while the Federal Ministry of Education, Science, Research, and Technology (BMBF) manages the co-operation at the German side.

The co-operation is open to all research workplaces and university teams, and other organisations, which have been involved in research or development.

In connection with the accession of the Czech Republic to the European Union, the German party re-valued the content and forms of the bilateral co-operation. In the effort to upgrade the quality of the existing co-operation, Germany wishes to progressively reduce the “classic” form of the scientific and technological co-operation based on the support of the scientists’ mobility and exchanges within joint two or three years long projects accepted on the basis of annual calls announced at fixed dates with the understanding that national research programmes, open to the countries from the Central and Eastern Europe will become the base for the future bilateral co-operation.

Other important areas of the future bilateral co-operation are also the co-operation of Czech and German scientists in the preparation of topics for the 7th EU FP and the participation of Czech subjects within the network ERA NET, where Germany acts in the role of a co-ordinator.

The official regional call, which opens German national research programmes to participants from the Central and Eastern European countries, together with all

necessary information about possibilities and terms of the programmes' participation, might be found at the following web addresses:

http://www.bmbf.de/foerderungen/2198.php
http://www.internationales-buero.de/foerderung_ib/WTZ/Europa/Announcement

This is publicised also on the web page of the Ministry of Education, Youth and Sports of the Czech Republic under the title of the bilateral co-operation with Germany.

Co-operation projects in the area of the basic research should be directed to DAAD. There has been a new agreement concluded between the Academy of Sciences of the Czech Republic and DAAD in 2003. It allows for exchanges of scientists, especially young ones, within joint projects. In 2004, the Academy of Sciences of the Czech Republic concluded an agreement with the Ministry of Education, Youth and Sports of the Czech Republic, which allows for the involvement of scientific teams from universities in the programme. Their exchanges will be supported by programmes of the Ministry of Education, Youth and Sports. The call for the presentation of project proposals in 2004, published on the web page of the Academy of Sciences of the Czech Republic, allows all relevant scientific teams and research institutes to utilise the programme.

More detailed information could be found at the address: ***http://www.cas.cz*** under the title of actual information by the Department of foreign affairs.

The co-operation in the field of agricultural projects continues in the original classic form of joint two or three-year projects, which have been supported on the German side by the Federal Ministry of Consumer Protection, Nutrition and Agriculture (BMVEL) and on the Czech side by the Ministry of Education, Youth and Sports (MEYS). Another call on the presentation of new project proposals was published in 2005.

Contact adresses:

1) **Co-ordination of bilateral co-operation at the Czech side:**
   Ministry of Education, Youth, and Sports of the Czech Republic
   Department of the international co-operation in research and development
   Karmelitská 7, 118 12 Praha 1
   Ing. Jan Talíř
   Tel.: 257 193 838
   E-mail: ***jan.talir@msmt.cz***

2) **Administration of projects accepted for the support:**
   Association of the innovative entrepreneurship of the Czech Republic
   Ms. Iveta Němečková
   Novotného lávka 5, 116 08 Praha 1
   tel.: 221 082 275
   E-mail: ***nemeckova@aipcr.cz***

3) **Co-ordination of the bilateral co-operation at the German side:**
   Osteuropa-Verbindungsbüro Bonn
   Karin Wedde-Mühlhausen

Köningswinterer Strasse 522-524, 532 27 Bonn
tel.: 00 49 228 449 2453
fax: 00 49 228 449 2400

8.6.1.2. France

France is a country with one of the biggest research potential in Europe. Because of historical but also different current reasons (the effort to strengthen its position in Europe), the country has always had big interest in wide ranging co-operation with the Czech Republic. There has been an agreement on the scientific and technological co-operation concluded with France in 1965. In 1996, there has been the so-called Programme of Integrated Actions BARRANDE started. This programme has been based on the funding of exchanges of workers involved in joint projects, but thanks to its scope, the way of co-ordination (CNRS, INRA, CNES, and others), the administration (the French agency EGIDE), and the experience from similar programmes, which have been in place in a number of countries, it means a big step forward. The bilateral co-operation with France is focussed on the support of state institutions and contacts with the most important French agencies like CNRS, INSERM, INRA, and some others take place within this co-operation. The co-operation provides also for chances of getting involved in framework programmes and supports the transfers of research results into practice.

In 2004, there was the call on the tender organised within the programme "BARRANDE 2005–2006".

The programme "BARRANDE 2005–2006" is open to all research workplaces, university teams and other organisations active in research or development. They may be focussed on any scientific field. The base of the programme is made of the financial support of two-year joint projects of Czech and French research teams in different scientific fields. Each project must have its responsible solver both at the Czech side and at the French side.

Project proposals are evaluated and selected for the financial support by the Czech-French Selection Commission, after the assessment made by scientific experts in each country.

If a project is accepted by the Czech-French Selection Commission, short-term exchanges of scientists and doctorate holders will be financially supported (two 1 to 2 week periods, or one month stays are typically envisaged for each party).

This co-operation form is supported by a target-oriented subsidy at the Czech side. Czech solvers will use it for the organisation of stays of French workers and their own travel expenses, including insurance, related to their travels to France. French partners organise stays of Czech workers and cover their own travel expenses, including insurance, when travelling to the Czech Republic.

The funding is organised annually and for this reason there must be a partial report issued at the end of the first year, including the financial settlement. When a project has finished, a report must be prepared and it must include scientific results, a financial report, and further co-operation perspectives.

The meeting of the Mixed Commission for the selection of projects took place in November 2005. The meeting passed the programme timetable for 2006 and for

the following years. The French party, in addition to that, proposed that projects, the solvers of which have been already working on a similar topic within bilateral co-operation with some other European country, should be supported more.

From the administration point of view, there was the decision adopted that solvers of accepted projects will not have to separately ask for the support of the second solution year. This applies as from the time of the call published in 2004.

Another call will be publicised during 2006 and a meeting of the Selection Commission, and the project selection for the period 2007–2008, is expected at the end of 2006.

The relevant forms are accessible at ***www.msmt.cz***.

Contacts:
For the French participants:
Agentura EGIDE, Paris, tel.: 00 31 1 40 40 57 48
For the Czech participants:
Association of the innovative entrepreneurship
Mgr. Věra Mísařová
Novotného lávka 5, 116 68 Praha 1
tel.: 221 082 274
fax: 221 082 276

8.6.1.3. Italy

With Italy, there has been an Agreement on the scientific and technological co-operation concluded in 1990. In 1998, the Co-operation Programme for this agreement has been concluded. Also, the first project selection took place. Another tender took place in the first half of 2001 and the selection of joint projects for the period 2002-2004 was organised at the beginning of 2002. The publishing of just another call on the presentation of joint Czech-Italian projects was envisaged in the second half of 2005. However, the Italian party was interested in making the period of the existing projects longer instead.

8.6.1.4. Austria

Austria is a country with the strong feel for the Central European region and contacts with Austrian workplaces, despite the fact that its research potential does not represent the top European level, make the involvement in European structures much easier.

In 1997, an agreement on the expansion of the co-operation ACTION with Austria was concluded. Both the Czech party and the Austrian party have commenced specific co-operation in the form of announced joint research and development projects. They are accepted on the basis of the decision of the Joint Scientific Sub commission, which has been established for this purpose. The gestor of this co-operation at the Austrian side is the Federal Ministry of Education, Science, and Culture. They are two-year projects. Administration is participated in by the representation of ACTION Czech Republic - Austria (the preparation and organisation of calls on the presentation of proposals and meetings of the Joint Scientific Sub commission) and the Association of the Innovative Entrepreneurship of the Czech Republic (the coverage of travel and stay expenses).

There has been the tender for 2006 announced with the deadline in October 2005. Projects will be selected by the Joint Scientific Sub commission in February 2006. Similar processes are envisaged in future years.

More detailed information is available from the representation of ACTION Czech Republic - Austria and instructions and forms are at the Internet address: ***http://www.DZS.CZ/AKTION/aktion.htm***.

Representation of ACTION Czech Republic – Austria
Senovážné náměstí 26, 111 21 Praha 1
Statutory representative: Ing. Helena Hanžlová
Tel.: +420 224 230 069
+420 224 398 234
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8.6.1.5. Greece

There has been a bilateral agreement on the scientific and technological co-operation concluded with Greece in 1984. This has been intensively fulfilled, according to two-year protocols, which include the list of joint projects.

In February 2003, there was the meeting of the Joint Czech-Greek Mixed Commission for the scientific and technological co-operation, which has passed a Work Programme of the Scientific and Technological Co-operation for the period 2003–2005, including the co-operation terms. This meeting also selected joint Czech-Greek projects, which will be supported by both parties. The Czech party provides solvers of accepted projects for mobility funds, which are covered by the Association of the Innovative Entrepreneurship of the Czech Republic. On the basis of tenders, the solvers may apply for additional support for their projects. Their list is presented at ***www.msmt.cz***.

The announcement of the next call on the presentation of joint Czech-Greek project proposals for the next period took place in the first quarter of 2005. Another meeting of the Joint Commission took place in autumn 2005 and it has passed the list of joint projects. For information, see the web pages of the Ministry of Education, Youth and Sport.

Contact address:
Ing. Jan Kofroň
Association of the Innovative Entrepreneurship of the Czech Republic
Novotného lávka 5, 116 68 Praha 1
tel.: 221 082 274
E-mail: ***kofron@aipcr.cz***

8.6.1.6. Belgium – the Flemish Community

The Czech-Flemish co-operation in research and development and the support of joint projects has started with the Flemish Belgian community in 2003. This co-operation takes place on the basis of the Agreement on Co-operation concluded by the government of the Czech Republic and the Flemish government, which was signed in 2002.

There was a call on the presentation of two-year Czech-Flemish project proposals announced in March 2003. The projects could relate to all areas of research and development planned for the period 2004–2005. In 2003, there were tenders on the projects organised in both countries. A meeting of the bilateral selection commission followed and the commission decided on the final selection of projects for the financial support by both parties.

Another call was publicised in spring 2005. The meeting of the bilateral selection commission took place in December 2005 and it has passed 16 new joint projects for the period 2006–2007. Another selection is envisaged in 2007.

More detailed information about the co-operation, including the list of accepted projects for the period 2004–2005, has been published at ***www.msmt.cz***.

8.6.1.7. Hungary

Thanks to the way of funding in Hungary, a bilateral international research project can be subsidised from state funds only on the basis of a concluded intergovernmental agreement. The agreement on the scientific and technological co-operation was executed in Praha in June 2001. There was a Mixed Commission established and a call on the presentation of bilateral project proposals for the period 2004–2005 was published. This call was finished and there are currently 6 projects in progress. Another call was announced in the first half of 2004 and the Mixed Commission has accepted 13 additional bilateral co-operation projects in October 2004. A new call took place in 2005. A selection of new projects for the period 2006–2007 will take place in Budapest at the beginning of 2006.

More detailed information could be gained by interested parties from the Department of international co-operation in research and development of the Ministry of Education, Youth and Sports of the Czech Republic, Karmelitská 7, 118 12 Praha 1, Tel.: 257 193 720, Fax: 257 193 713 – from RNDr. Josef Janda, e-mail: ***josef.janda@msmt.cz***.

8.6.1.8. Poland

Proposals from all research and development fields, with the duration of two-years, are accepted on the basis of the Agreement on the scientific and technological co--operation executed by the governments of the Czech Republic and the Polish Republic executed on 13 January 2000. The agreement allows for different forms of co-operation, from joint projects, exchanges of research workers, exchanges of information and documents, organisation of joint scientific meetings to joint utilisation and exchanges of technologies.

The financial requests of Czech solvers might relate, according to the agreement of the two parties, especially to mobility costs (stay and travel expenses).

It is assumed that the Polish partner would lodge, at the same time, the relevant project proposal on the Polish side.

There were scientific and technological co-operation projects running in 2005, which had been approved for the period 2004–2005. Negotiations with the Polish party, which should allow for the approval of joint projects for the next period, are expected at the beginning of 2006.

More detailed information is available to interested parties in the Department of international co-operation in research and development of the Ministry of Education, Youth and Sports of the Czech Republic, Karmelitská 7, 118 12 Praha 1, Tel.: 257 193 720, Fax: 257 193 713 – from RNDr. Josef Janda, e-mail: ***josef.janda@msmt.cz***.

8.6.1.9. Slovenia

The agreement was executed in autumn 1995. This agreement has also replaced, in a formal way, the agreement on the scientific and technological co-operation with the former Yugoslavia concluded in 1989. Slovenia is an advanced country with both industrial and research traditions. Meetings of the Mixed Commission took place regularly every two years, but as from 2002, it is organised annually. Also, calls on the presentation of new joint projects have been announced every year since 2002. The last call was publicised in 2005. The presented project proposals were assessed at the end of 2005 and the Mixed Commission approved of the selected projects for the support in the period 2006–2007. Another joint call is planned in 2006.

8.6.1.10. Slovak Republic

The agreement on the scientific and technological co-operation with the Slovak Republic was signed in June 1999. This has meant the supplementation of an important part of mutual relations with the Slovak Republic and the creation of the prerequisite for the commencement of official co-operation of experts from both countries.

Tender related to the presentation of projects for the period 2002–2003 was announced with the deadline on 15 October 2001. There were project proposals presented in all areas of research and development fields with the duration of two years. The agreement allows for different activities, from joint projects and exchanges of research workers, exchanges of information and documents, organisation of joint scientific meetings to the joint utilisation and exchanges of technologies. The financial requests of Czech solvers might relate, according to the agreement of the two parties, especially to mobility costs (stay and travel expenses).

The Slovak partner presents, at the same time, the relevant project proposal to the Ministry of Education of the Slovak Republic in accordance with its publicised instructions.

There were almost 300 joint project proposals presented within the first tender. This means that the first step was made in the right direction, but not all parties proposing high quality projects could be satisfied because only about 80 proposals were selected for the support. The interest was not lacking in 2001 either. There were more than 250 interested parties, together with Slovak partners. There were 218 projects for the period 2002–2003 selected. Other tenders took place in 2003 in Telč and in 2005 in Piešťany. There were 70 two-year projects selected in both cases. They are

on the list, which is at the disposal at the web page of the Ministry of Education, Youth and Sports. Another meeting is envisaged in 2007 in the Czech Republic.

More detailed information is available to interested parties in the Department of international co-operation in research and development of the Ministry of Education, Youth and Sports of the Czech Republic, Karmelitská 7, 118 12 Praha 1, Tel.: 257 193 720, Fax: 257 193 713 – from RNDr. Josef Janda, e-mail: ***josef.janda@msmt.cz***.

8.6.2. USA

The support of joint Czech-American projects is based on the Agreement concluded between the government of the Czech Republic and the government of USA on the scientific and technological co-operation signed in 1998. The American Science Information Centre, o.p.s. has been authorised to collect applications for the support of bilateral co-operation, to organise the assessment and to prepare materials for the meetings of the Joint Agreement Council. The Joint Council recommends projects on the basis of assessments of the individual proposals for discussions within the public tender announced every year by the Ministry of Education, Youth and Sports of the Czech Republic.

Activity kinds:

- Joint research project (the duration of 4 years at the maximum) is prepared by a Czech solver together with his or her American partner
- Joint science conferences, seminars, courses, or workshops can take place either in the Czech Republic or in USA. The events must be precisely determined and participated by 10 scientists from each party at the maximum. Their usual duration is 3–5 days and they can include the relevant visits of scientific workplaces. Scientists from other countries can participate on their own expense, on the basis of an invitation by the event organisers.

Each party covers basic activity expenses taking place in its own country. The scope of the co-operation covers all science and technology areas: Natural sciences and mathematics and technical science, healthcare and medical science, energy, agriculture, the protection of environment, the standardisation, and the utilisation of natural resources, transport, and the science policy.

Funds serve only to supplement the already existing sources of the parties and they are determined for the support of the mutual co-operation. All Czech research institutions, both university and academic ones, or sector and private can apply for the support.

Contact address:
AMVIS
Ing. Simona Lauerová
Valdštejnská 20, Praha 1
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http://www.amvis.cz

The Protocol on the agreement on the scientific and technological co-operation concluded between the National Science Foundation of USA and the Ministry of Education, Youth and Sports of the Czech Republic was signed in 1994 and it replaced the Protocol on the agreement on co-operation in basic fields concluded by the National Science Foundation and the Czechoslovak Academy of Sciences. The National Sciences Foundation is responsible for the co-ordination of all American participation and the Academy of Sciences of the Czech Republic has been authorised to co-ordinate the Czech participation. According to this Protocol, both parties implement also the involvement of universities, research institutions, and other scientific subjects in the activities. The Academy of Sciences of the Czech Republic has established, in co-operation with the Ministry of Education, Youth and Sports, at its side, the Commission for the co-operation of the Czech Republic with the US National Science Foundation, which acts as the top body assessing and accepting joint research projects. Currently, there are more than 30 joint projects. The Czech solvers can apply for the support in public tenders announced within the programme CONTACT.

The Czech Republic also participates in research organised in the area of high energies and elementary particles in FERMILAB laboratories – the D0 experiment. More detailed information can be received from RNDr. Miloš Lokajíček in the Institute of Physics of AS CR – ***lokajicek@fzu.cz***. This co-operation is also financially supported from national resources.

8.6.3. RUSSIAN FEDERATION

This country puts a significant stress on bilateral agreements on the co-operation in research and development, especially on the contractual connection of the trade, industrial, and scientific and technological co-operation. The area of the international co-operation in research and development is managed by the Ministry of Education and Science of the Russian Federation. Russia shows a significant interest in bilateral agreements on scientific and technological co-operation because of the possibility of receiving additional governmental resources for the concluded documents. Nevertheless, it offers an access to all areas of formerly closed cosmic and strategic research and the access to critical technologies. There has been an intergovernmental agreement on the trade, economic, and scientific and technological co-operation concluded with the Russian Federation. Currently, there have been almost 40 joint projects accepted for solution. They have been approved of by the Czech-Russian Commission for the Scientific and Technological Co-operation. There has been also the International Innovation Centre (MIC) for the support of projects transferring technologies between the Czech Republic and the Russian Federation working since 2003, after the representatives of the chairmen of the national parties in the Czech-Russian Commission for the scientific and technological co-operation met in November 2003. They have mutually approved of new bilateral scientific and technological co-operation projects and also passed some important decisions, which related to the structure and the working way of MIC.

The next meetings of the Czech-Russian Commission for the scientific and technological co-operation took place in 2004 and 2005 and they discussed some new bilateral projects. There was a meeting of the Czech-Russian Intergovernmental Commission for the Economic, Trade and Scientific and Technological Co-operation organised in Praha

in September 2005, according to the new intergovernmental agreement concluded after the accession of the Czech Republic to the European Union. The recent results have been confirmed in the area of the scientific and technological co-operation. A meeting on the assignment of new joint scientific and technological projects will take place in Moscow at the beginning of 2006. Later in 2006, we envisage another call on the presentation of Czech-Russian project proposals within the scientific and technological co-operation.

Solvers of projects approved of by the International Commission can apply for subsidies within public tenders organised in connection with the programme CONTACT. There has been a programme created also on the Russian side, which allows for the support of Russian researchers.

Parties interested in some of the forms of the bilateral scientific and technological co-operation with the Russian Federation can turn to the Department 32 in the Ministry of Education, Youth and Sports – RNDr. Josef Janda, Tel. +420 257 193 720, e-mail: ***josef.janda@msmt.cz***.

8.6.4. ASIAN COUNTRIES

Japan

There was an agreement on the scientific and technological co-operation concluded with Japan in 1978, which managed exchanges of researchers, but it had stagnated after 1992 because of its out-of-date character. That was the reason why a number of meetings with the agencies JICA, JISTEC, JSPS, and some others were initiated by the Czech and Japanese parties and work related contacts were created with the Japanese STA (Science and Technology Agency) and JSPS. In January 1998, an intergovernmental Japanese-Czech workshop dealing with the co-operation in research and development was organised. The parties selected and accepted more than 60 joint projects from all different areas of research and development. A call on the presentation of project proposals for the period 2002–2004 was publicised in 2001. In addition to these activities, there were preparatory discussions under way for the preparation of an agreement between the Czech Ministry of Education, Youth and Sports and JSPS (Japan Society for Promotion of Science) and AS CR. The agreement should allow for the extension of joint projects by Czech and Japanese scientists. MEYS initiated a meeting with the Academy of Sciences of the Czech Republic with the objective to extend the agreement on co-operation between AS CR and JSPS with joint projects – for workers from all kinds of research and development organisations. Negotiations of MEYS, AS CR, and JSPS took place in Tokyo in May 2005. They resulted in an agreement on the extension. There were further negotiations between AS CR and JSPS with the objective to agree on an addendum to the agreement in autumn 2005. It might be assumed that this agreement would become usable in 2007. The information will be publicised on the MEYS web. The Japanese party has not been considering another round of negotiations with regard to joint projects for 2005 so far. However, further negotiations probably will take place in 2006.

People's Republic of China

The Czech Republic has inherited the agreement on the scientific and technological co-operation with the People's Republic of China, which was signed in 1952. The

Chinese party, even after the changes, which have taken place recently, insisted on the performance of that agreement. A significant stress was put, for example, on visits of Chinese technicians in Czech companies, which had almost nothing in common with the real research. For that reason, there was a new agreement prepared in 1995. It has been more modern and it replaced the agreement of 1952. Currently, there are a number of high quality results of joint projects and there is a prerequisite in the now fast developing China that other suitable co-operation chances will occur in near future. Meetings of the Mixed Commission take place in alternative years and proposals can be presented on the basis of calls published on the web page of the Czech Ministry of Education, Youth and Sports (the expressions of interest). The last meeting of the Joint Committee took place in May 2004 and it approved of new joint projects. The projects have been implemented usually within the maximal period of three years since 2004. The list of approved projects, the researchers of which can apply for the financial support within the public tender, is published at the address: ***http://www.msmt.cz***. Another meeting related to the period of 2006 should take place in Praha in 2006 and a call on the presentation of project proposals (expressions of interest) could be expected at the beginning of 2006. The new joint projects should thus commence in 2007.

South Korea

The agreement with South Korea was signed at the beginning of 1995. There have been several joint research projects solved. They have been approved of by the diplomatic way. The Czech Republic is interested in the recovery and extension of the co-operation and it offered the conclusion of a co-operation agreement to the Korean party. At the Czech side, there is an interest in top technologies existing in all areas of research and development. South Korea has expressed its big interest in the extension of the scientific and technological co-operation in 2004. A call on the presentation of project proposals (the expressions of interest) was announced at the end of 2004. Further information is available at the address ***http://www.msmt.cz***. Another meeting of the joint commission of the Czech Republic and South Korea took place in May 2005 and it approved of two joint projects.

The contact person for Japan, People's Republic of China, and South Korea:
Dr. Miloš Chvojka, CSc.
Ministry of Education, Youth and Sports of the Czech Republic
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8.7. SUPPORT OF THE INTERNATIONAL CO-OPERATION IN RESEARCH AND DEVELOPMENT BY THE MINISTRY OF EDUCATION, YOUTH AND SPORTS OF THE CZECH REPUBLIC

The assignment of subsidies to project solutions within the international co-operation in research and development, in the form of public tenders, takes place every year in the five following areas: COST, EUREKA, EUPRO, CONTACT, and INGO. These programmes were progressively approved of in recent years. As the National Research Programme I, which covered the mentioned programmes of the international co-operation in the period 2004–2005, has finished, MEYS announces calls related to the five original programmes, which have been now approved until 2008. There is thus an assumption that MEYS will announce the calls repeatedly until then. After the end of the period, there will be negotiations on the extension of these programmes until 2012. The notification of these programmes is currently under preparation for the European Union.

The programmes COST and EUREKA have been described in Parts 8.4.1 and 8.4.2.

8.7.1. EUPRO

The aim of EUPRO is to contribute to the integration of the Czech research and development in the EU workplace network, especially in the form of participation in EU research and development framework programmes (see Chapter 8.2). Czech participants in framework programme projects cannot get a direct financial support from the state budget because that would be in dispute with European standards and the Czech legislature related to the state intervention in competition terms. The main purpose of EUPRO is thus the support of the preparation of solvers' participation in Czech projects, especially with regard to the organisation of this preparation. The National Information Infrastructure – NINET and NICER, i.e. the National Information Centre for the European Research and the Regional and Professional Contact Organisations, is especially financially supported. A number of regional contact organisations and professional contact organisations – see Table VIII, commenced their activities in 2000. The EUPRO programme has not been closed for this kind of activities.

As from 2004, individual solvers, during the preparation and filing their project proposals within the EU framework programmes, can get the financial support. Further information about the preparation support of projects is available in the National Contact Organisation in the Technological Centre of AS CR – RNDr. Vladimír Albrecht, CSc.

8.7.2. CONTACT

CONTACT allows for the support of participation of Czech research and development workers in multilateral research programmes ESA, SEI (the Central European initiative), OECD, and NATO and in some important bilateral programmes with the countries, with which the Czech Republic has got an agreement on co-operation in research and development concluded and also in programmes by the National Science

Foundation – NSF. Activities based on intergovernmental programmes, which relate to exchanges of researchers within the projects of scientific and technological co-operation, are administered by the Association of Innovation Entrepreneurship.

8.7.3. INGO

INGO (International Non-Governmental Organisation) is the programme started in 1998.

The objective of INGO activities is to make the membership of research and development institutions, but also individuals in international non-governmental organisations, which are involved in research, easier. It supports the active participation of Czech researchers in managing bodies of international non-governmental science organisations and procures, on the basis of the government Resolution No. 560/2003, projects related to the participation of the Czech Republic in the international organisations CERN (European Organisation for Nuclear Research) and SÚJV Dubna (Joint Institute of Nuclear Research).

INGO activities are announced, according to the Act No. 130/2002 Coll. on the research and development support, in the form of public tenders. Proposals of individual projects are assessed by the advisory body of the Deputy Minister of Education, Youth and Sports who can ask for professional opinion other experts.

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8.7.4. PUBLIC TENDER 2006

The text of the announced public tender has been publicised on the Internet page of the Ministry of Education, Youth and Sports of the Czech Republic. The terms of the tender and rules of the financial support of research and development projects have been established in the Research and Development Support Act No. 130/2002 Coll. This Act covers also changes in some relating laws (the Research and Development Support Act) and the regulations are managed also by the government Directive No. 461/2002 of 8 November 2002.

The public tender 2006 was announced in September 2005 and its period was from 7 September to 7 November 2005. The assessment period started on 8 November 2005 and finished on 20 January 2006 by the announcement of the tender results on the Ministry web.

The public tender 2007 will be probably announced again in September 2006. The text of the announced public tender is always placed on the Ministry web and publicised in the Commercial Journal.